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ABSTRACT

Because of the current trend toward further education for all high school graduates, there is need to prepare low-achieving students for college-level work. A developmental program was designed for Puerto Rico Junior College to improve the performance of high school graduates with low academic averages and entrance examination scores. After a year of pilot operation, the "Ahead in College" program has been evaluated. It includes training in the basic skills and concepts of English, Spanish, mathematics, and several business skills. Courses in human relations, music, arts, and sports are also offered. Individual counseling is provided. The maximum program load is 17 hours a week, with no more than 12 credit hours. On the basis of monthly progress evaluations of each student, transfer is granted to the regular 2-year curriculum of the college. Participants in the program pay regular tuition and fees. During the pilot year, the program had 46 participants. Student profiles showed that personal and family problems had been responsible for previous low achievement. The performance of students promoted from the pilot program compared with the performance of regular students showed that the pilot group competed successfully. In view of this, it is suggested that more such programs be started to serve students with an average or low level of achievement in high school. An essential target for such programs is student attitudes and motivation. (MS)

AHEAD IN COLLEGE: A DEVELOPMENTAL PROGRAM FOR LOW ACHIEVERS

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The trend of tomorrow is to universalize higher education. Logan Wilson has pointed out that places will have to be provided somewhere for all high school graduates who wish to continue their formal education. He also makes clear that this implies more diverse educational purposes and standards.[1] We must add that such a reality will require completely new programs and approaches designed for those individuals with average or less ability and limited financial means. The greater challenge is not one of providing physical facilities or reshaping educational purposes and standards but of designing the program, curriculum and teaching methodology that will be best suited to the great numbers of high school graduates that are not up to the level of achievement presently required in the regular first year courses of college education.

Junior and community colleges are already in the vanguard of the effort to educate these young men and women. As Joseph P. Cosand has stated:

> By 1980 the community colleges and technical institutes... will have reappraised themselves and have decided that everyone in this country has the right to reach his full potential. If universities and four-year colleges, obsessed with academic respectability, continue to restrict admissions and programs, the community colleges of necessity must open their doors wide and say: "This is your college. This is the people's college."[2]

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1. Wilson, L., "Higher Education and the National Interest," in Campus 1980 (Alvin C. Eurich, ed.) Delacorte Press, N.Y., 1968, p. 23 at 33.

2. Cosand, J.P., "The Community College in 1980," in Campus 1980, cit. n.1 supra. p. 134 at 138.

Benjamin Bloom has traced the way to success in the effort to extend educational opportunity by designing new approaches to teaching and learning:

> Most students (perhaps over 90 percent) can master what we have to teach them, and it is the task of instruction to find the means which will enable our students to master the subject under consideration. Our basic task is to determine what we mean by mastery of the subject and to search for the methods and materials which will enable the largest proportion of our students to attain such mastery.[3]

All of us that serve in positions of leadership in the junior college field must face up to the ever nearer responsibility of adopting universally an open door policy. The ERIC Clearinghouse has published a careful study by John E. Roueche that compiles and analyses the projects now underway in this field. The "open-door" policy is defined as one committed to provide an education for all high school graduates and others who can profit from instruction including a special program for those students who either score below a given percentile in placement examinations or did not achieve a C average in high school. The Roueche study, however, included only special programs of a remedial nature, that is, programs directed to the remediation of student deficiencies in order that the student may enter a program for which he was previously ineligible.[4]

This paper will deal with the experimental design of a developmental --as distinguished from remedial--program. Even if the clientele and

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3. Bloom, B., "Learning for Mastery," in Evaluation Comment, UCLA-CSEIP, vol. 1, no. 2, May 1968, p. 1. For research support of our rationale see pp. 2-6.

4. Roueche, J., Salvage, Redirection or Custody? Remedial Education in the Community Junior College, American Ass'n of Junior Colleges, Wash. D. C., 1968, at viii.

general objectives are very similar, the developmental type of program refers to the development of skills and attitudes that will serve the student to perform better either as a college student or without higher education. As Roueche points out, research on developmental programs is nonexistent, and his report does not include data on these programs because they are too recent in origin for enough information to be available. This paucity of evidence has prompted us to share with the readers of this paper our experience in the design and execution of a developmental program for high school graduates with low academic averages and CEE scores, in the hope that it will promote interest in other institutions in this very important aspect of American higher education of the future.

The Need and Origins of the Program.

In the summer of 1968 the Dean of Admissions and Registrar of Puerto Rico Junior College informed the Administration that eventhough press and other announcements published the requirement of a 2.0 high school average for admission to the College, about 175 students with lower averages had applied for admission. All other accredited higher education institutions in Puerto Rico also require a minimum of 2.0 high school index for admission. Very few cases are admitted with a lower average and only on a probational basis. Only those with a CEEB score of 650 or higher are admitted as regular students. Therefore, the students concerned had no available opportunity to pursue higher education in Puerto Rico unless something was done. The College had received in past years up to 300 applications per year from high school graduates that did not achieve a 2.0 average in their secondary studies. It had been observed that many of these achieved average or

much better (425-650) scores in the verbal, mathematics and english C.E.E.B. aptitude tests. This fact showed and apparent incongruity between demonstrated aptitude and previous performance in high school.

A statistical analysis of this group's indexes and scores revealed the following:

TABLE I: COMPARATIVE INDEX AND SCORE

			CEEB Test Score	
	Students Admitted	Other Applicants	Students Admitted	Other Applicants
Maximum	3.5	1.97	1910 (637)	1652 (550)
Median	2.4	1.82	1389 (463)	1311 (437)
Minimum	2.0	1.33	930 (310)	1037 (344)

It was easily ascertainable that the high school average and not the CEEB test performance had been the determinant factor for refusing admission. The administration was conscious that two decades ago the College had been born on the basis of a remedial course offered by a high school of commerce for high school graduates. On the basis of this fact and experience, the College decided to experiment with a pilot program offered to 100 of the applicants, to determine whether such a program could be succesful in developing in the students the necessary skills to perform in college at a higher level of achievement than they had performed in high school.

The College's assumption was that many of these students may have had such low averages in high school because they didn't have opportunities afforded to others, and not necessarily due to a lack of capability. The program was designed to give these students the opportunity

to serve themselves and the community, an opportunity that would have been denied them without a specially designed program.

The College was encouraged by a memorandum of the Middle States Association of Colleges and Secondary Schools, which reads as follows:

> Many Colleges and universities, in recent months and years, have devised special programs and policies to meet the particular needs of the pre-college segment of the student population whose social, cultural, educational, economic... that is to say, disadvantaged, status has not permitted the development of those qualities and circumstances which normally provide ready access to hegher education. This is all to the good.[5]

This is the first time in the history of Puerto Rican education that a program is designed to serve the disadvantaged and underachieving student at the superior education level. It is based on Council of Higher Education official data that shows 24,946 students will graduate from high school in Puerto Rico by 1975 and only 13,695 will be able to pursue college-level studies. Less than 55% will be able to register in colleges and universities if present requirements, programs and trends continue unaltered and unaided.[6] The Ahead in College model program may help to show the way in which to deal with this potentially grave problem in Puerto Rican and American higher education.

The Objectives and Nature of the Program.

The program offered is focused on three main objectives of educational development: First, it provides an understanding of,

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5. Memorandum of June 12, 1968 to Admissions Officers of Member Institutions of the M.S.A.C.S.S. from Calvin L. Crawford, Administrative Secretary. The memorandum also emphasized the lack of information regarding these programs.

6. Cámara de Representantes, Estudio del Sistema Educativo de Puerto Rico, 1960, pages 2121-2123, specially Table 263.

and training in, the basic skills and concepts necessary for a succesful college education. Second, it provides essential communication skills in English and Spanish as well as a basic knowledge of the essential concepts of mathematical thinking. Third, it provides several basic vocational skills in business that will increase the opportunities of employment of the participants upon completion of the program and also their chances of succesful junior or senior level college studies, whatever their choice might be. After one year, those students receiving their Certificate may be able to earn a living as junior office clerks or pursue musical or aesthetic vocations. They will also be prepared to pursue further vocational or liberal studies. The program includes specific periods of supervised study and counseling by honor students and professional counselors besides the required classroom work, so as to provide individual attention and progress in all three goals.[7]

After one full year of pilot operation, the program has been evaluated by the College to determine its potential for expansion. The description that follows is the revised product of that evaluation.

Admission and Registration. - Students that have graduated from the general course in an accredited secondary school with al least twelve units in the last three years, and who has completed English 12 and two courses in mathematics are elegible. The number admitted to the special program is determined by the availability of space and facilities.

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[7] We intend to develop specific measurable objectives for each area of development so that they can be continuously evaluated. We are also in the process of developing concise objectives in terms of changed student behavior. Cf. Mager, R., Preparing Instructional Objectives, Fearon Press, Palo Alto, Cal., 1966.

All applicants follow the normal registration procedures of the College. Participants in the program are admitted to the College as special students in homogeneous and small sections. A special minimal set of regulations is made applicable to them during the first semester.

Student Loads. - No student in the program is permitted to take more than seventeen (17) hours a week per semester or more than twelve (12) of those for credit. The Director of the program is given authority to determine the load of each student. A student is authorized to drop a course he is taking for credit within the first two weeks of a semester if he wishes a refund. Students are not permitted to drip non-credit courses unless the students is suspended or leaves the program. The College reserves the right to require a student at any time to withdraw from any course.

Attendance. - Regular attendance is required, and absences are reported to the Director. More than three unexcused absences are basis for an investigation by the Dean of Students.

Examinations and Grading. - Evaluation Procedures have been designed by the Program Committee composed of the Director and participating professors. Courses for credit are graded as all other such courses. Grading in non-credit courses is based on two categories: passed or continuing. The "passed" level can be achieved at any time during the academic year. Monthly evaluations are made by the Program Committee in accordance with the progress made by the individual student, and he is so informed.

Achievement and Transfer. - Transfer to the regular two-years program of the College is granted at the end of each semester by a Committee composed of the Director, one professor, and the College's Dean of Admissions on the basis of the monthly evaluations made by professors. All normal requirements must be fulfilled before a transfer is granted. At the end of the Program those students recommended by the Director receive a Certificate. Any student that has obtained achievement standing in the Program must satisfy the requirement of at least two additional years in the College before being a candidate for an A.A. Degree.

Program of Study. - The maximum program of study consists of not more than 12 hours a week for credit and no more than 10 hours a week in non-credit courses for no more than 17 hours a week of total academic load. Electives or auditing of courses are permitted only if specifically authorized by the Director.

The program of studies combines the successful experiences of institutions that have developed compensatory programs based entirely on practical application subjects with those of other colleges that have focused on remedial or developmental courses. The curriculum is as follows:

First Semester

General Studies 100	-Introduction to College Studies	2 hours a week, no credit
Languages 100	-Communication Skills	2 hours a week, no credit
Mathematics 99	-Introduction to Mathematical Concepts	2 hours a week, no credit
Secretarial 120	-Typewriting	2 credits
Elective (if authorized)		3 credits

Second Semester

General Studies 101	-Introduction to College Studies	2 hours a week, no credit
Languages 101	-Communication Skills	3 hours a week, no credit
Mathematics 100	-Introduction to College Mathematics	3 credits.
General Studies 106	-Supervised Study and Counseling	2 hours a week, no credit
Secretarial 280	-Filing Systems	2 credits
Management 131	-Human Relations	3 credits
Electives (if authorized)		4 credits

Student Services and Regulations. - All student services offered by the College are available to the participants in the program. All student regulations of the College apply to special students.

Tuition and Fees. - Participants in the program are required to pay the regular College tuition and fees. Scholarship moneys are being sought by the institution for participants in the program, but serious difficulties have been found to obtain external funds for this purpose.

The Courses of Instruction.

The following are brief descriptions of the required courses offered:

General Studies 100-101: Introduction to College Studies. No credit.

This course offers in the first semester a thorough training in the rational process as a skill. Students are taught how to form, evaluate and organize ideas; outline; summarize; analyse problems;

and prepare brief and basic essays on issues of relevance for them. The subject matter dealt with is the nature of man and his relation to his environment. The second semester is dedicated to the same training with different subject matter: the introductory and basic concepts of the social and natural sciences and the humanities as related to the student's immediate environment. The course intends to provide him with the essential conceptual skills to be able to continue College studies.

Language 100-101: Communication Skills No credit

This course is designed to improve the communication skills of the students. It is directed to train the students in common skills that are essential for reading, writing and speaking English and Spanish, with emphasis in conversational, problematic and thought-provoking situations and approach. The use of books and library facilities is emphasized. Whenever possible, laboratory and audio-visual work is provided. Group reports on topics selected by the students. Two semesters.

Mathematics 99: Introduction to Mathematical Concepts No credit

This course is designed to increase the understanding of mathematics and algebraic fundamentals and to correct deficiences in previous education. A diagnostic evaluation is made by the professors at the begining of the course and effort is made to correct individual shortcomings and develop the skills needed for the credit course in Mathematics. First semester.

Mathematics 100: Introduction to College Mathematics. 3 credits

The course reviews fundamental operations. Study of logic, Sets. Operations with sets. Natural numbers. Integers. Rational numbers. Irrational numbers. Real numbers. Algebraic expressions. Operations on polynomials. Factoring. Fractions Negative and fractional exponents. Linear equations in on variable. Linear systems. Graphs. Second semester. For credit.

General Studies 105-106: Supervised Study and Counseling. No credit.

Students meet regularly under the supervision of honor students and the Head Counselor of the College to prepare their assignments, read, write or improve on any of the offerings of the program. Vocational and personal guidance is also provided to the students by a full-time counselor at individual meetings mutually agreed to.

Secretarial 120: Typewriting. 2 credits

Introduction in the touch method of typewriting for personal and business letters; addressing envelopes; index cards; articles and manuscripts; tabulation and stencil cutting. Preparation of reports. This course is designed to meet the need for typing as a useful skill in college life and also elsewhere. First semester. For credit.

Secretarial 280: Filing Systems. 2 credits

The application of filing principles to specific situations. Indexing and filing rules according to the different systems. Practice in the use of filing equipment in English and Spanish. Second semester. For credit.

Management 131: Human Relations. 3 credits

The interaction and interpersonal activity of people in the process of decision-making. Individual leadership and group behavior is analyzed through discussion and case presentations. Managerial and labor relations are examined in production, communications and salesmanship. One semester. For credit.

The following are brief descriptions of the elective courses in the two main areas of business and the arts:

Business

Management 102: Principles of Efficiency 2 credits

How to deal with oneself and with others. Physical, physiological and psychological conditions which affect the rythm of efficiency. Climate, intelligence and sex in their relation to efficiency. The influence of alternate work and play upon production in the light of scientific research. A study of famous personalities and of their formulas for success. First semester. For credit.

Management 281: Office Methods and Systems 3 credits

A study of the various principles of management applicable to office organization. Modern office systems and routines, layouts, control of office work. Office assistants. Practical knowledge of filing procedures; actual practice in the use of time-saving devices and office machines. Second semester. For credit. Pre-requisite: Secretarial 120.

Secretarial 121-122: Elementary and Intermediate Typewriting 4 credits

Training in the fundamental techniques of touch typewriting. Emphasis on correctness, analysis of errors and remedial drills, erasing

and making corrections. Care of the machine. Practice in typing manuscripts, simple business letters and tabulations, use of carbon paper. At the end of the second semester students must be able to type 35 words a minute for ten minutes with no more than six errors. For those wanting to perfect the skills learned in Secretarial 120. For credit.

The Arts

Art. 101: Art Essentials — 2 credits

Application of the fundamental principles of art as the basis of appreciation. Color and design as sources of aesthetic pleasure. Art in the home and the community. One semester. For credit.

Music 101: Music Appreciation — 2 credits

Music as a source of aesthetic enjoyment. Students learn to recognize the forms of musical composition through lectures, records and actual demonstrations. One semester. For credit.

Music 103-104: Choral Group I — 2 credits

Group instruction in voice given to develop good habits in singing. The members are trained in the artistic interpretation of choral music. Rehearsals twice weekly, throughout the year. For credit.

Education 109: Arts and Crafts — 2 credits

The teaching and learning of art for creative expression. Planning and selection of materials. Crafts. Principles of design, color, drawing. One semester. For credit.

P. E. 101-104: Sports Activities I-II — No credit

Developing skills and abilities for individual and group recreational activities in the sports practiced in Puerto Rico.

Students' Profile.

Out of the hundred students invited by letter to participate in the pilot year, 76 were present at an orientation meeting, 57 actually registered and 10 left the program in its first week due to lack of interest or for economic reasons. These facts left a group of 46 registered participants. A comparative profile of the members of the group as related to members of the regular first year class was obtained. It is summarized as follows:

TABLE II: COMPARATIVE PROFILE

Item	Disadvantaged Group (%)	First Year Class (%)
Residence in metropolitan area	93	75
5 - 10 members in family	77	72
Annual family income:		
$3,000 or less	56	53
$6,000 or less	65	78
$6,000 or more	30	17
Parent's occupation:		
Professionals	5	11
Teachers	2	4
Self-employed	40	12
Employees	25	40
Laborers	7	8
Retired	4	12
Age median of 18-20	55	57
Sex:		
masculine	59	49
feminine	41	51

Table II (cont.)

Item	Disadvantaged Group (%)	First Year Class (%)
Residence while studying:		
in own home	80	84
with relatives	17	6
Married students	5	2
Applied to the junior college only	40	30
Intention to transfer to a 4-yr. college	70	67
Job interest to become a:		
Professional	70	57
Teacher	17	27
Businessman	7	8
Employee	-	4
Laborer	2	-
High School studies in:		
Urban public school	75	64
Urban private school	22	25
Rural schools or other	3	21
Interested in program in:		
Liberal Arts	52	44
Education	19	26
Business	29	27
Vocation	-	3
Source of income for studies:		
Parent's salary	70	55
Scholarship or family aid	14	15
Loan	9	10
Parent's education:		
College or more	34	22
High School	22	40
Elementary or less	44	38
Needs economic aid to study	54	60
Self-evaluation		
Serious problems	5	5
Some emotional problems	60	55
No problems	35	40

The comparative profile study evidenced several startling facts. First, the percentage coming from the metropolitan area was much higher in the disadvantaged group. Second, the group was composed of greater extremes in terms of income--with more members from higher income families where the parents were self-employed and could pay for their children's education--compared to median incomes and employees in the student body at large. However, a greater percentage had attended public free tuition schools than the regular students. Third, males were predominant in the disadvantaged group, contrary to female predominance in the student body. Fourth, and significantly, a much higher percentage of the disadvantaged group lived with relatives, even if coming mostly from the area where the College is established, hinting at a possible high incidence of marital problems among parents of the group. Fifth, even if a greater percentage in the group applied only to the junior college, a much higher percentage expected to become professionals and prefered liberal arts courses when compared to the preferences evidenced in the regular student body. Amazingly enough, none in the group expressed interest in vocational courses. This points out to an immesurable and unreasonable level of expectations in the disadvantaged group, which might result more from their higher-income social level than from an actual self-realization of their personal and educational potentialities. Sixth, the group evidenced a tendency to the extremes regarding parent's education, but in general, parent's were better educated than those in the regular student body. Seventh and final, a higher percentage of the group felt they had "some" emotional problem than the percentage of members of the regular student body expressing the same self-evaluation.

Our brief experience has not permitted us yet to go more deeply into facts derived from the comparative profile study. Next year we intend to use instruments to measure motivational and attitudinal levels of the special students as compared to regular students.[8]

The Program in Operation.

The evaluation process within the program was a continious one from the very beginning, one in which administrators, teachers, counselors and several students participated in bi-monthly meetings for that purpose.

It became clear that the higher representation of the higher income population was due to the fact that the College is a private rather than public one, and that scholarships and loans are mostly granted in Puerto Rico on the basis of academic exellence,[9] thus in effect closing the doors of such a program to disadvantaged students from still lower income levels of the population. We can safely assume, however, that the program would be atractive and useful to many more lower-income students if financing could be provided for them.

During the pilot year the group evidenced more clear the characteristics hinted at in the comparative profile study. Family problems emerged as the main reason for previous low achievement,

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8. Cf. ERIC Chearinghouse, "A Developmental Research Plan for Junior College Remedial Education" numbers 1 and 2, UCLA, 1968, to serve as models.

9. See for a complete explanation of this grave situation in Puerto Rico and for one proposal for its solution: García-Passalacqua, "El Financiamiento de la Educación Superior Privada en Puerto Rico," mimeographed testimony before the Council of Higher Education, May 10, 1968; 14 pages.

and the role of the Counselor grew in regards to inter-personal relations, motivation and attitudes to the extent that the super-vised study sessions had to be left to honor students to direct. Lack of motivation emerged as the main obstacle in trying to develop the necessary skills. The teacher-student relationship became essential in this respect as well as an essential rapport between the students, the director of the program and the counselor. Class participation was diagnosed as the sine qua non of succesful motivation efforts, and professors unable to use this methodological approach were substituted.

After the first semester several relevant facts became evident. The first one was that for some members of the group a semester of the developmental program was enough, that thirteen (13) of them had performed at a much higher level than the average student in the College in their courses for credit and that they were ready to enter regular college courses. As a matter of fact, the group as a whole had performed only at a slightly lower level than the average regular students of the College. This conclusion was arrived at by discussing on a comparative basis, at the end of the first semester, each individual case with all the members of the program's faculty and administration.

The group's performance in non-credit courses was judged on the basis of mostly subjective criteria, but a comparative tabulation of their performance in the first semester in courses for credit [10] was self-evident:

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10. Credit courses were taught at the same level and with the same requirements as those taught to regular students. Some regular students attended the sections with the special students. "Control" groups were set up to assure that professors were not being lenient to the special students.

TABLE III: COMPARATIVE GRADES

Grade Distribution	In the College(%)	Group as a Whole(%)	Thirteen(%)
A's	5.8	9.5	15.5
B's	27.5	37.8	57.7
C's	43.4	26.3	23.0
D's	16.1	15.8	3.8
F's	4.2	10.5	none
W's	3.0	none	none
C or above	76.7	73.6	95.8
below C	23.3	26.3	3.8

The determination to refer eight students to vocational schools was made after receiving said recommendation from their counselor and discussing their performance of D's and F's in the first semester and low evaluation in non-credit courses.

A "controlled" section was set up for the second semester, composed of 22 students, out of which 11 were students promoted from the 13 good performers in the pilot program. The best two in the group of thirteen were incorporated into a regular first year section. With an equal number of regular students and students promoted from the pilot program, a tabulation was made at the end of the second semester of the whole section's performance in the five first year courses taken for credit. Results were as follows:

TABLE IV

COMPARATIVE PERFORMANCE IN FIRST YEAR COURSES

Grades	College as a Whole (%)	Regular Students(%)	Students from Ahead in College (%)
A's	5.8	2	0
B's	27.5	15	14

Table IV (cont.)

Grades	College as a Whole (%)	Regular Students (%)	Students from Ahead in College (%)
C's	43.4	17	29
D's	16.1	23	23
F's	4.2	34	31
W's	3.0	9	3
C or above	76.7	34	42
below C	23.3	66	58

Conclusions derived from this tabulation are obvious. The section as a whole performed at a lower level than the average for the College as a whole. However, the students coming from one semester in the Ahead in College program performed as a group much better than the students who had not participated in the program. The number of B's and D's was more or less equal, but there was a significant difference in the higher percentage of C's and the lower percentage of F's and W's in the group that had benefited from the pilot program. Another important correlation was that the group performed lowest in English and Mathematics, but in both cases the pilot group performed better than the regular students.

Another comparative study was undertaken regarding the group that had not been promoted to the regular first year classes. This group, composed of the 25 students remaining in the developmental program, took eleven credit hours of courses regularly offered by the College described previously in this paper. Their performance was as follows, as compared to regular students:

TABLE V

COMPARATIVE PERFORMANCE IN CREDIT COURSES

Grades	College as a whole (%)	Students in Ahead in College (%)
A's	5.8	5.3
B's	27.5	17.2
C's	43.4	39.7
D's	16.1	15.1
F's	4.2	14.1
W's	3.0	8.6
C or above	76.7	62.0
Below C	23.3	38.0

The evidence derived from the performance of the group in their second semester showed a grades curve that was almost normal, except for a higher percentage (14.7% higher) of below C averages obtained in credit courses by members of the special group when compared with the performance of regular students. However, the failures factor was lower than that of the special students who took the full first semester of first year courses. The greater incidence of failures and withdrawls in both cases was in mathematics.

In summmary, the performance of the special students in credit courses didn't differ greatly from that of regular students in the College after having received the benefits of the developmental program for one or two semesters, respectively. Their performance in said courses was evidence of the capability of most of the member of the group to pursue higher education succesfully.

To serve as a guide regarding the further improvement of the program, the program director requested a careful evaluation of it from each participating student, as well as a post-program self-evaluation of the students. The results of the evaluation were as follows:

TABLE VI: STUDENT EVALUATION

Usefulness of the program:	Very useful	95%
	Some usefulness	5%
	Useless	none
Usefulness of courses:	Introduction to College Studies	76%
	Mathematics	13%
	Electives (for credit)	8%
	Supervised Study and Counseling	2%
	Communication Skills	1%
Difficulty of courses:	Mathematics	52%
	Electives (for credit)	34%
	Introduction to College Studies	8%
	Supervised Study and Counseling	5%
	Communication Skills	1%
General evaluation of program:	Excellent	83%
	Satisfactory	13%
	Good	4%
	Bad	none
Self-diagnosis of previous disadvantage:	Irresponsability	41%
	Laziness	19%
	Family problems	15%
	Immaturity	10%
	Bad study habits	10%
	Intellectual incapacity	none
	Economic problems	none
	Others	5%
Evaluation of counseling:	Great utility	64%
	Useful	31%
	Unused	5%

The students made several specific suggestion on how to improve the program. Among these, the following are under study by the College: to offer a wider variety of electives, to reevaluate and possibly divide the communication skills course into separate Spanish and English ones, and to offer more courses for credit.

It is significant that the recurring unsolicited comment made in the questionaire regarding the program was that "it is a means to see reality and find oneself." This comment, originated in the students, ratifies the basic developmental rather than remedial or strictly academic nature of the program, and reinforces its other results.

Conclusions and Prospects.

The results reported herein are the product of a single academic year's experience. Final results were as follows:

TABLE VII: FINAL PERFORMANCE

Students Invited:	100
Students Interested:	76
Students Registered:	57
Withdrawls after a Week:	10
Promoted after a Semester:	13
Promoted after a Year:	20
Referred after a Semester:	8
Referred after a Year:	6
Total Promoted:	33
Percentage Promoted	58%

It is too early to frame any final conclusions regarding the developmental program described herein. However, several hypothesis can be infered from a year's experience, to be proven or disproven after another full year of operation as a pilot program. Said hypotheses are as follows:

The average comparative performance of the pilot group as a whole in relation to regular students as well as the satisfactory performance of a considerable number of its members in regular courses raise a significant question regarding the propriety of a 2.0 average and CEEB measures to the detriment of other personal attributes as criteria for admission to higher education.

In the specific case of Puerto Rico, educational authorities should consider broadening the curriculum at the junior college level to require three instead of two years of residence to students wiith low achievement records in high school, and offer developmental programs during their first year. Otherwise, the island will be far behind the rest of the nation in implementing the right of every man to an education.

The existing discrimination against low achievers in high school must end, and our experimental project herein described serves as an obvious justification for the existence of developmental programs in higher education that will end the unreasonable limiting of the educational opportunities of a high percentage of students who can perform in good standing at the college level.

Other specific conclusions can also be derived.

New programs and aproaches are needed to serve individuals with an average or lower level of achievement after their graduation from high school. The design of developmental--as distinguished from merely remedial programs--shows promise to fulfill that objective. There is a considerable number of willing and able high school graduates who are being left out of college only due to present academic requirements, programs and trends. There is continued interest on the part of students in a developmental program as the one herein described.

Disadvantaged students do not necessarily come from the lowest income groups in the community. The incidence of marital problems among parents and the dependence on relations deserves further study as a primary potential cause of low achievement. An essential element of any such program is to tackle student attitudes and motivation. A change of attitudes is quickly reflected in improved performance. One of the gravest aspects of the situation is the high level of expectations in the students. In evaluating student performance in any such program great care must be taken to accord respective value to effort, capability and performance. There is a clear need for a similar project and study to be conducted in public free-tuition institutions of higher education, and for a comparison of results and conclusions.

All these hypotheses will be reexamined and revised after the program's second year of operations. Subsequent results will serve to review, expand and improve this initial presentation of findings. An effort will be made to share further findings with the local and continental academic community, in the hope that the model program will serve to open greater and wider opportunities for youth in America.